

The diagram illustrates the architecture of an email system and the flow of messages. It includes the following components and connections:

- Internet**: Represented by a cloud at the top.
- Email Server**: A large rectangle containing:
 - SMTP Server**: A smaller rectangle inside the Email Server.
 - Inbox (102a)**: A rectangle inside the SMTP Server.
- Standard email client, i.e. Outlook or Netscape (101)**: A rectangle at the bottom.
- User's client (102)**: A label pointing to the email client.
- User's client connects to SMTP server (102b)**: A label pointing to the connection between the client and the SMTP server.

Message Flow:

- Mailing List (103)**: A label pointing to the Internet cloud.
- Mailing list sends email to user's client (101)**: An arrow from the Internet to the email client.
- User retrieves email and stores it in own client (102)**: An arrow from the email client to the SMTP server.
- SMTP server stores email in user's inbox (102a)**: An arrow from the SMTP server to the inbox.
- User's client connects to SMTP server (102b) in order to send email to the Internet**: An arrow from the email client to the SMTP server.
- SMTP server sends email to Internet (103)**: An arrow from the SMTP server to the Internet.

The diagram illustrates an email system architecture for spam filtering, involving several components and their interactions:

- Standard email client, i.e. Outlook or Netscape (101):** The user's local email client.
- User retrieves email and stores it in own client:** The process of downloading email from the server to the client.
- User's client connects to SMTP server in order to send email to the Internet:** The process of sending email from the client to the SMTP server.
- 104 (Email Server):** The central server component, which includes:
 - 104a (Inbox):** A sub-component where the SMTP server stores email in the user's inbox.
 - 104b (SMTP Server):** The server responsible for sending and receiving email.
- 105 (capture sender's email address for later analysis):** A module that captures the sender's email address for analysis.
- 106 (capture recipient email address for later analysis):** A module that captures the recipient's email address for analysis.
- 107 (reject email considered as spam for the recipient):** A module that rejects email considered as spam for the recipient.
- Internet (103):** The global network for email transmission.

Flow of Email:

- Mail is received from the Internet (103) by the SMTP Server (104b).
- The SMTP Server (104b) stores the email in the user's inbox (104a).
- The user's client (101) retrieves the email from the inbox (104a).
- When sending an email, the user's client (101) connects to the SMTP server (104b).
- The SMTP server (104b) captures the sender's email address (105) and the recipient's email address (106) for later analysis.
- Based on the analysis, the system may reject the email (107) or send it to the Internet (103).

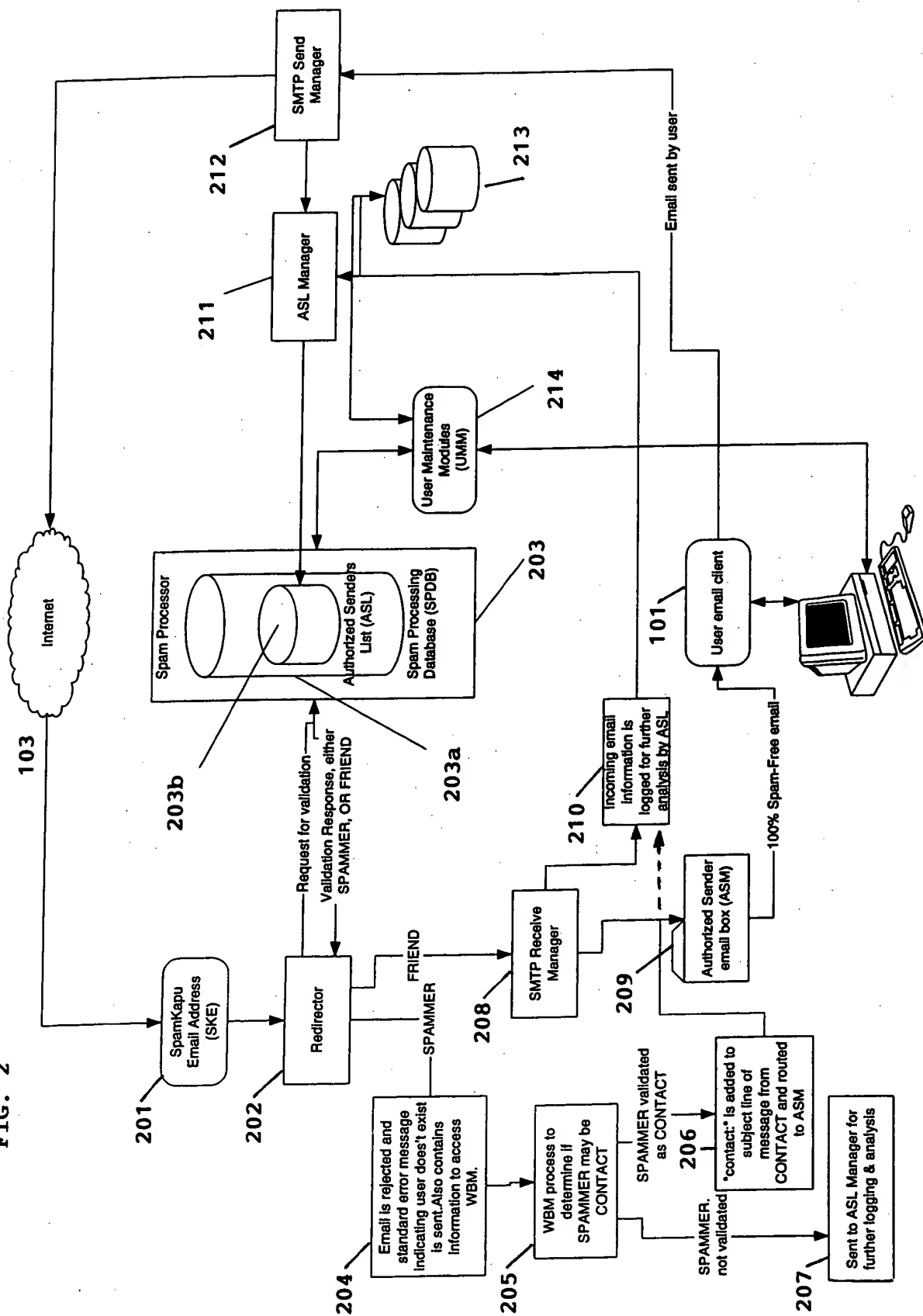
[illegible]

FIG. 3A (PRIOR ART)

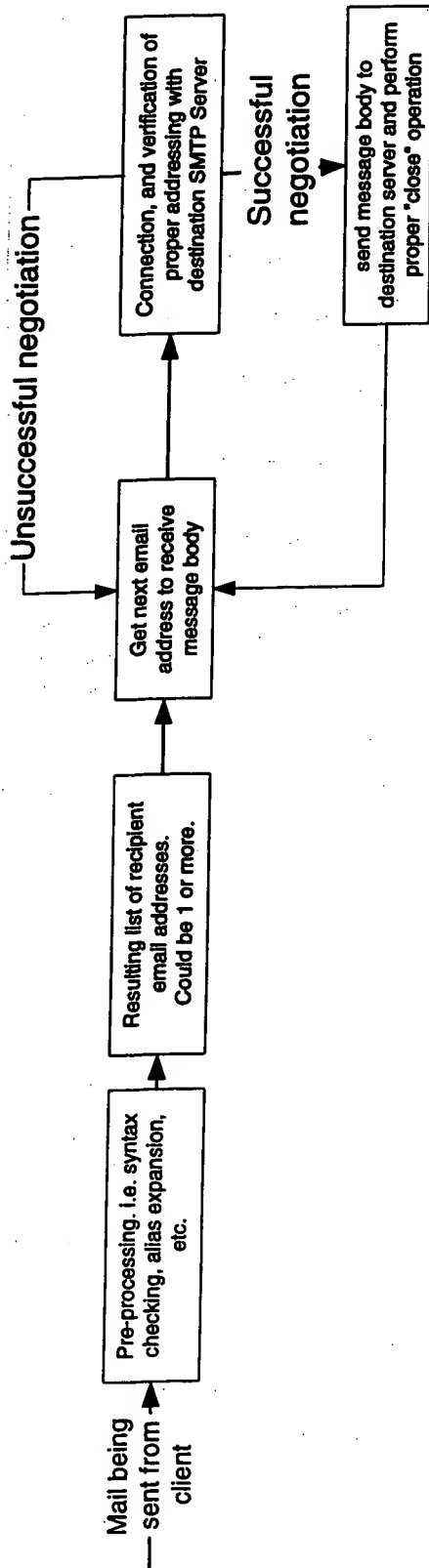


FIG. 3B

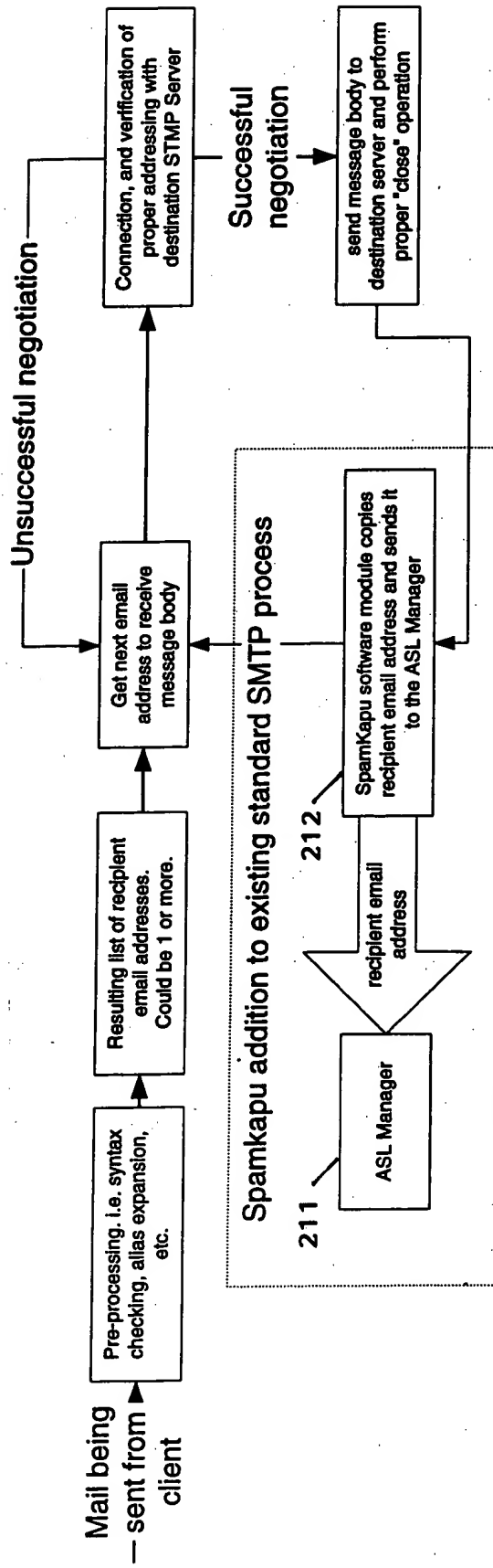


FIG. 4A (PRIOR ART)

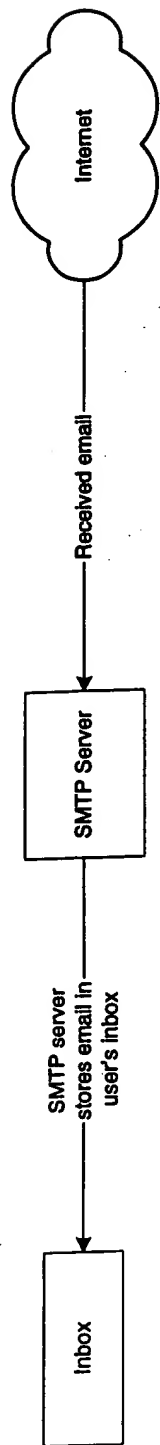


FIG. 4B

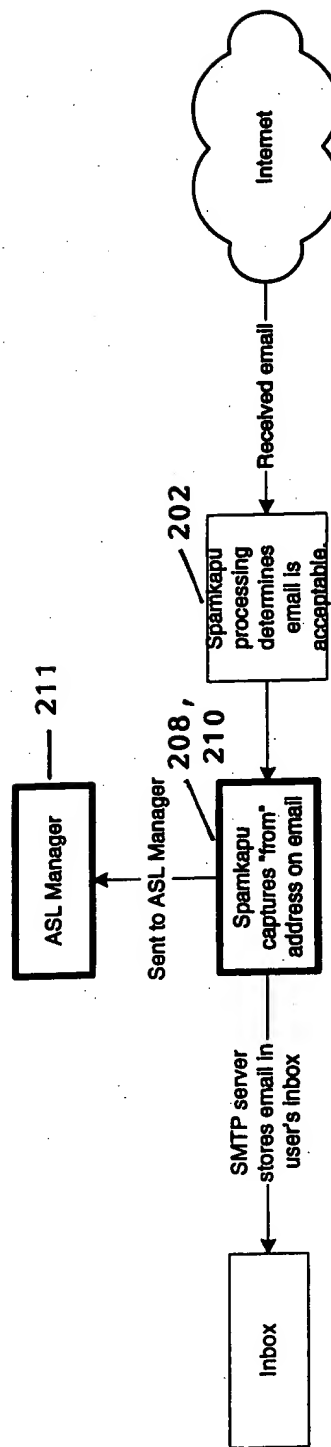


FIG. 5

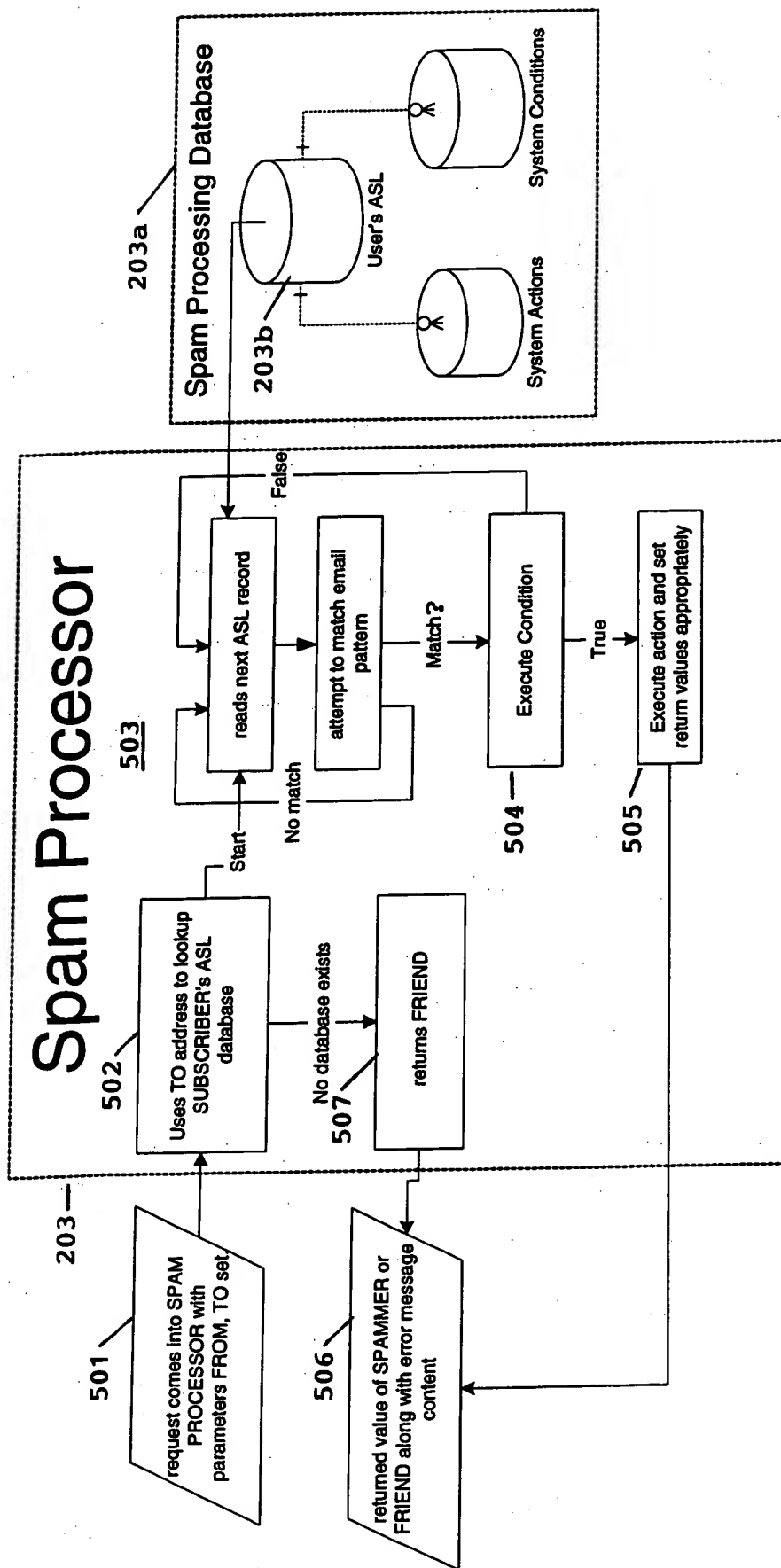
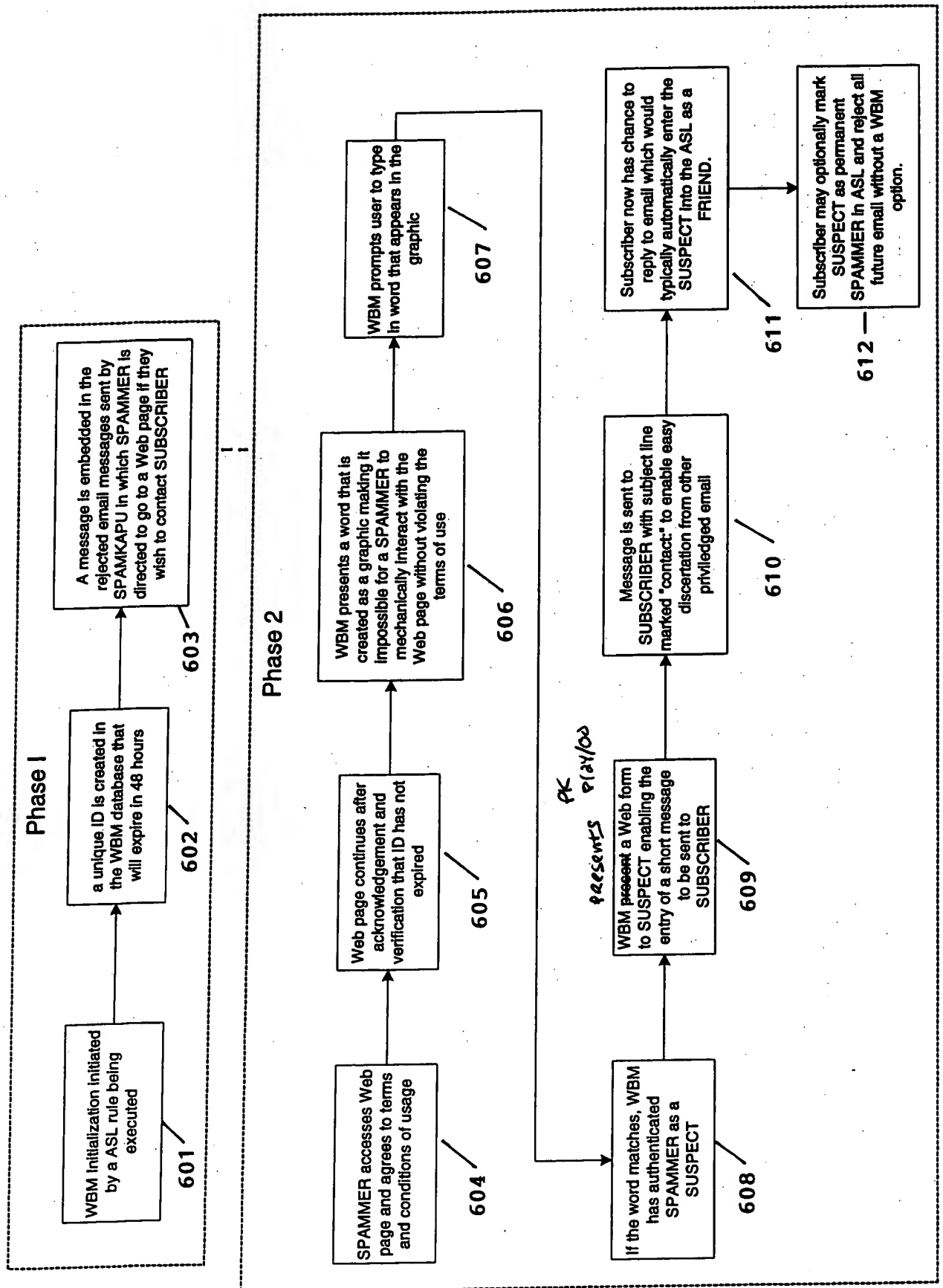


FIG. 6



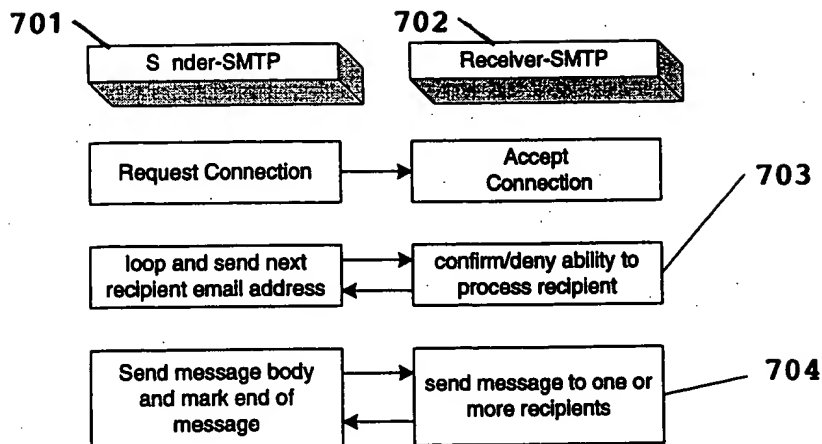


FIG. 7A

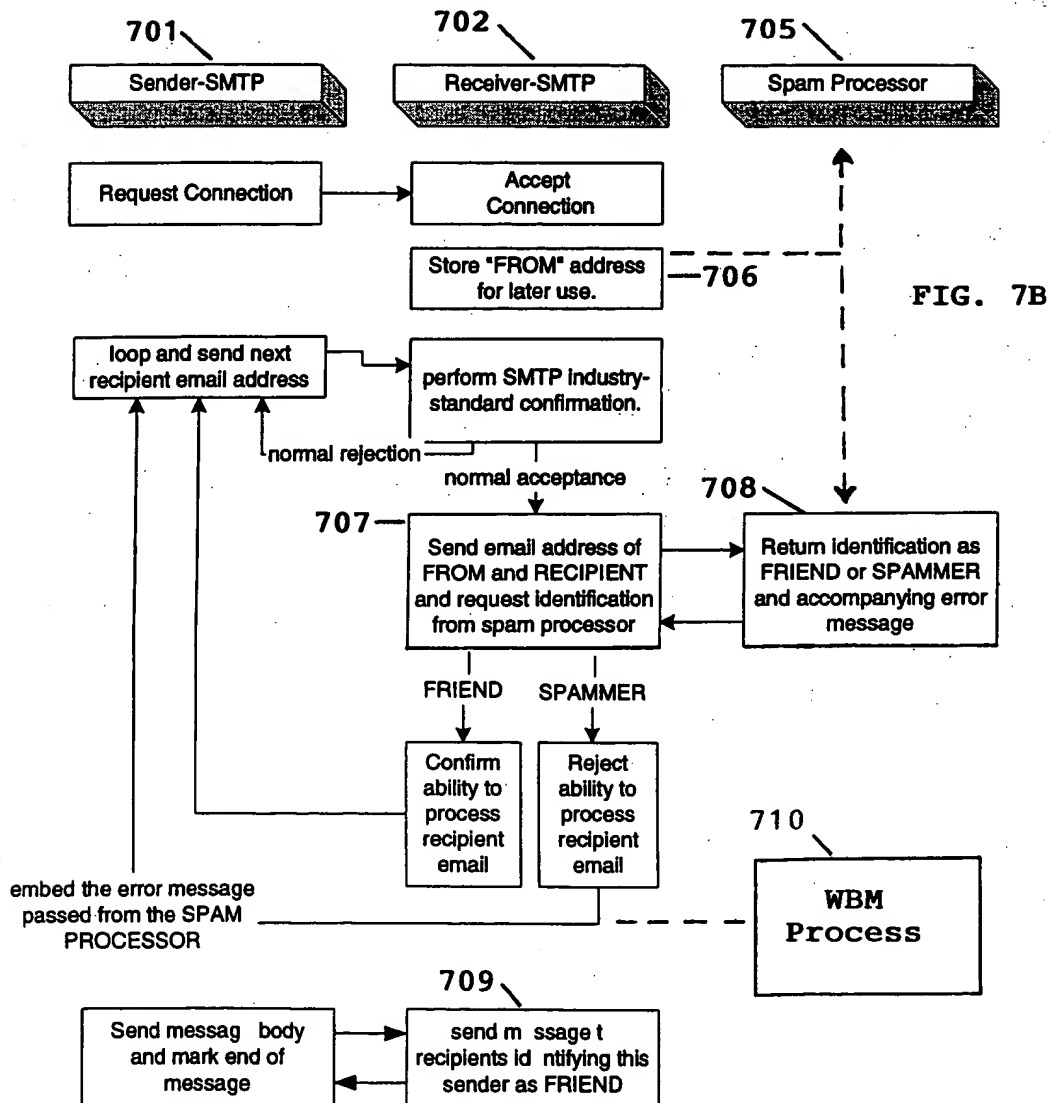


FIG. 7B

FIG. 8

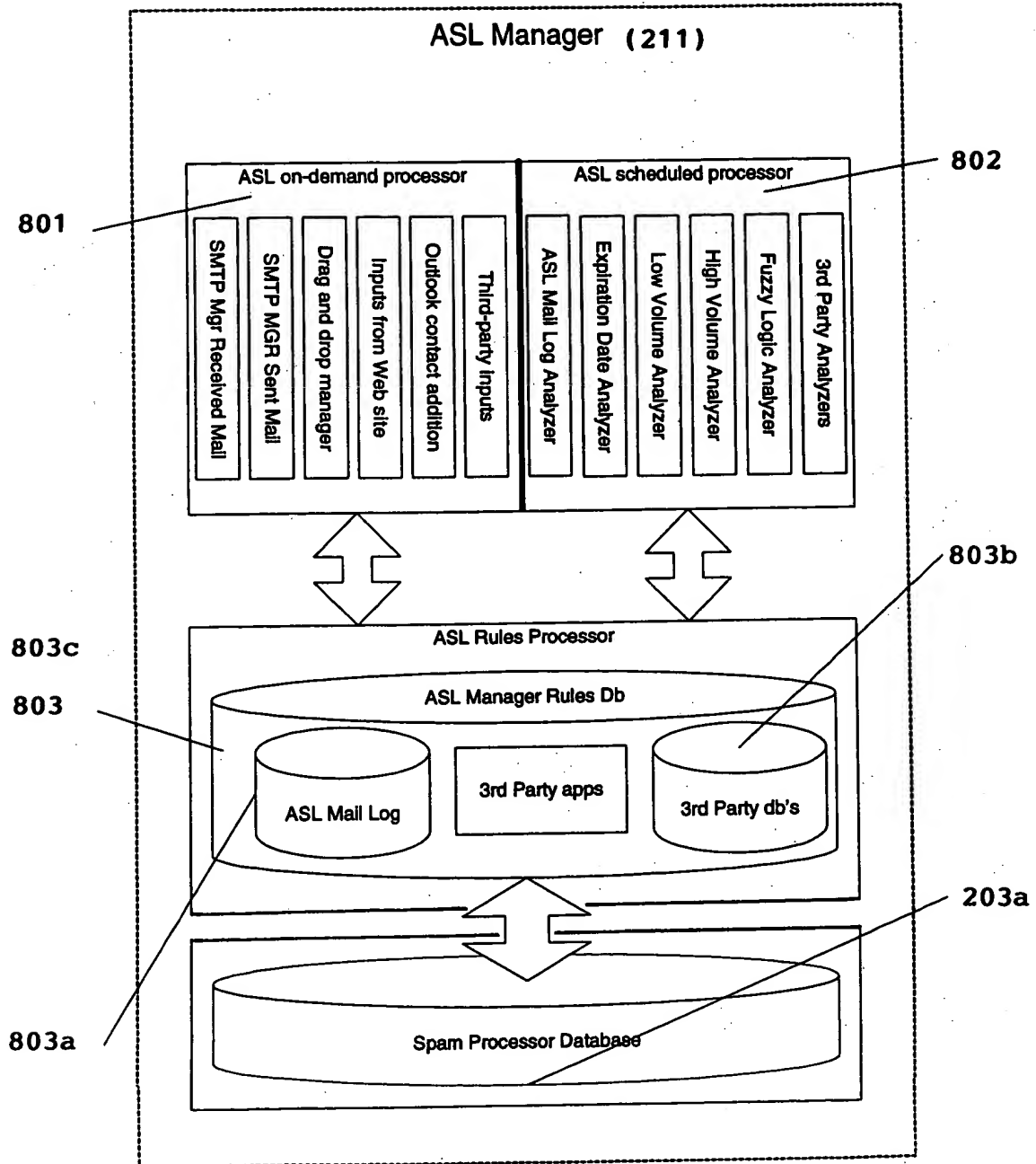


FIG. 9

